UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1459

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

30955 7590 05/05/2008 LATHROP & GAGE LC

4845 PEARL EAST CIRCLE SUITE 300 BOULDER CO 80301 EXAMINER
RICHEY, SCOTT M

PAPER NUMBER

ART UNIT

DATE MAILED: 05/05/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/532,453 | 04/22/2005 | Philip Heinz | 433165 | 3912 |

TITLE OF INVENTION: SYSTEMS AND METHODS THAT DETECT CHANGES IN INCIDENT OPTICAL RADIATION

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(8) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$720 | \$300 | \$0 | \$1020 | 08/05/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless corrects maintenance fee notifica | correspondence includir ed below or directed oth | of transmitting the 1336 ig the Patent, advance of herwise in Block 1, by (a | rders and notification of r a) specifying a new corres | naintenance fees wi pondence address; | II be and/or | mailed to the current (b) indicating a sepa | correspondence address as rate "FEE ADDRESS" for |
|--|--|--|--|--|---|---|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | Not Feet paps | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing of transmission. | | | |
| 30955 LATHROP & 4845 PEARL E/ SUITE 300 | AST CIRCLE | /2008 | I bo | Cert | ificate | of Mailing or Trans | nission deposited with the United t class mail in an envelope above, or being facsimile ate indicated below. |
| BOULDER, CO | 80301 | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/532,453 | 04/22/2005 | | Philip Heinz | | | 433165 | 3912 |
| | | | CHANGES IN INCIDENT | | | | _ |
| APPLN, TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | YES | \$720 | \$300 | \$0 | | \$1020 | 08/05/2008 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | J | | | |
| RICHEY, | | 2877 | 250-559320 | | | | |
| CFR 1.363). Change of corresp Address form PTO/SI "Fee Address" ind PTO/SB/47; Rev 03-C Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA | nge of Correspondence "Indication form ted. Use of a Customer A TO BE PRINTED ON | 2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or ty data will appear on the p Ta substitute for filine an | 3 registered patent vely, e firm (having as a agent) and the name meys or agents. If n printed. | attorn memb s of u o nam | er a 2 o to e is 3 | ocument has been filed for |
| (A) NAME OF ASSIG | GNEE | categories (will not be pr | (B) RESIDENCE: (CITY | and STATE OR Co | DUNT | RY) | up entity 🚨 Government |
| 4a. The following fee(s) Issue Fee Publication Fee (N | vo small entity discount p | | b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo | d. Form PTO-2038 | is atta | ched. | |
| - 11 | s SMALL ENTITY state | is. See 37 CFR 1.27. | ☐ b. Applicant is no lon | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accepte tes Patent and Trademark | d from anyone other than t Office. | he applicant; a regis | tered a | attorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | Registration No | | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223 | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450. | FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR | on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO | etain a benefit by th imated to take 12 m idual case. Any cor er, U.S. Patent and 1 D THIS ADDRESS. | e publ inutes nment Traden SENI | ic which is to file (and to complete, includin s on the amount of tin hark Office, U.S. Depo O TO: Commissioner | by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450, |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

PO Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 05/05/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|---------------|----------------------|---------------------|------------------|
| 10/532,453 | 04/22/2005 | Philip Heinz | 433165 | 3912 |
| 30955 75 | 90 05/05/2008 | | EXAM | UNER |
| LATHROP & GAGE LC | | | RICHEY, | SCOTT M |
| 4845 PEARL EAST CIRCLE | | | ART UNIT | PAPER NUMBER |
| SUITE 300 BOLL DER CO.80 | 301 | | 2877 | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 282 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 282 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | | |
|-----------------|--------------|--|--|
| 10/532,453 | HEINZ ET AL. | | |
| Examiner | Art Unit | | |
| Scott M. Richey | 2877 | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-ve

| All calms being allowable, PROSECUTION ON THE MENTS IS (OK NE rerewith (or previously mailed), a Notice of Allowance (PTOL-85) or othe NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS, of the Office or upon petition by the applicant. See 37 CFR 1313 and MI. I. This communication is responsive to <u>all correspondence filed as o</u> | r appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initiati PEP 1308. |
|---|--|
| 2. The allowed claim(s) is/are <u>1-21,24-30,32,33 and 37-52</u> . | |
| International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | eceived. eceived in Application No s have been received in this national stage application from the |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this of noted below. Failure to timely comply will result in ABANDONMENT of THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | |
| A SUBSTITUTE OATH OR DECLARATION must be submitted. No INFORMAL PATENT APPLICATION (PTO-152) which gives reason | |
| 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be sul (a) ☐ including changes required by the Notice of Draftsperson's Pa 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Amen Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.34(c)) s | tent Drawing Review (PTO-948) attached ment / Comment or in the Office action of hould be written on the drawings in the front (not the back) of |
| each sheet. Replacement sheet(s) should be labeled as such in the head 5. DEPOSIT OF and/or INFORMATION about the deposit of B attached Examiner's comment regarding REQUIREMENT FOR The | IOLOGICAL MATERIAL must be submitted. Note the |
| | |
| Attachment(s) I. ☑ Notice of References Cited (PTO-892) | 5. Notice of Informal Patent Application |
| Notice of Proffperson's Potent Proving Pavious (PTO 049) | 6 T Interview Summany (DTO 412) |

- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- Paper No./Mail Date 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance

9. Other _____.

/Patrick J Connolly/ Primary Examiner, Art Unit 2877 Application/Control Number: 10/532,453

Art Unit: 2877

DETAILED ACTION

Allowable Subject Matter

Claim 1-21, 24-30, 32, 33, and 37-52 are allowed.

The following is the examiner's statement of reasons for allowance:

As to claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious "measuring the voltage across one or more of the areas of photoconductive material using at least two second electrical contacts that are different than the at least one pair of first electrical contacts, a change in the measured voltage being indicative of a change in illumination," in combination with the rest of the limitations of the claim.

As to claim 18, the prior art of record, taken alone or in combination, fails to disclose or render obvious "input electrodes beyond each of the one or more areas of photoconductive material, for driving current, provided by a source, through the one or more areas of photoconductive material; output electrodes beyond each of the one or more areas of photoconductive material, for sensing a voltage drop across the areas of photoconductive material, for sensing a voltage drop across the areas of photoconductive material, the input electrodes being different from the output electrodes [...] a change in voltage being indicative of change in the optical intensity distribution," in combination with the rest of the limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Application/Control Number: 10/532.453

Art Unit: 2877

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Richey whose telephone number is (571) 270-1296. The examiner can normally be reached on Monday - Thursday, 10:00 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on (571) 272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott M. Richey Patent Examiner Art Unit 2877 /Patrick J Connolly/ Primary Examiner, Art Unit 2877